

U.S. Department of the Interior  
Bureau of Land Management  
Glenwood Springs Field Office  
50629 Highway 6 and 24  
Glenwood Springs, CO 81601

## DOCUMENTATION OF LAND USE PLAN CONFORMANCE AND NEPA ADEQUACY

NUMBER: CO-140-2006-150 DNA

PROJECT NAME: Red Apple Fire Emergency Stabilization Plan

PLANNING UNIT: Garfield

LEGAL DESCRIPTION: T7S R94W, Sec 3 & 4 Sixth P.M. (see attached map for details)

APPLICANT: BLM, Colorado State Office

ISSUES AND CONCERNS (optional): none outstanding

DESCRIPTION OF PROPOSED ACTION: The Red Apple Fire burned 138 acres of BLM land. The proposed action is to aerially seed BLM lands that were burned. In addition, vegetation monitoring is needed to assess the success of seeding for three consecutive years. Also, weed spraying and monitoring over a three year period is part of this proposed action. Details of this proposed action are described in the attached Red Apple Fire Emergency Stabilization Plan.

LAND USE PLAN (LUP) CONFORMANCE REVIEW: The proposed action is subject to the following plan:

Name of Plan: Glenwood Springs Resource Management Plan.

Date Approved: Jan. 1984, revised 1988, amended in November 1991 - Oil and Gas Leasing and Development - Final Supplemental Environmental Impact Statement; amended Nov. 1996 - Colorado Standards and Guidelines; amended in August 1997 - Castle Peak Travel Management Plan; amended in March 1999 - Oil and Gas Leasing & Development Final Supplemental Environmental Impact Statement; amended in November 1999 - Red Hill Plan Amendment; and amended in September 2002 – ***Fire Management Plan for Wildland Fire Management and Prescriptive Vegetation Treatment Guidance, Revised 09/2004.***

✓ The Proposed Action is in conformance with the LUP because it is specifically provided for in the following LUP decision(s): Fire Management Plan for Wildland

Fire Management and Prescriptive Vegetation Treatment Guidance, Approved: 2002, Revised 09/2004. pg. 34. (Referred to hereafter as the “Fire Plan”)

\_\_\_ The Proposed Action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decisions (objectives, terms, and conditions):

#### REVIEW OF EXISTING NEPA DOCUMENTS:

Name of Document: Glenwood Springs Resource Management Plan (see above amendments)

#### NEPA ADEQUACY CRITERIA:

1. Is the Proposed Action substantially the same action and at the site specifically analyzed in an existing document? Yes, the Fire Plan gives broad allowances and guidance for developing an emergency stabilization plan, specifically mentioning seeding and weed abatement activities under interagency guidelines as well as the LUP provisions to protect watersheds, maintain or increase wildlife populations, and stabilize grazing operations.
2. Was a reasonable range of alternatives to the Proposed Action analyzed in the existing NEPA document(s), and does that range and analysis appropriately consider current environmental concerns, interests, and resource values? Yes, the interdisciplinary team has reviewed other options (e.g. drill seeding, no action, etc...) and has determined that aerial seeding is the desired alternative.
3. Does the information or circumstances upon which the existing NEPA document(s) are based remain valid and germane to the Proposed Action? Is the analysis still valid in light of new studies or resource assessment information? Yes, the proposed action is an accepted and valid practice following a wildfire under pg. 34 of the Fire Plan, recently amended 9/2004.
4. Does the methodology and analytical approach used in the existing NEPA document(s) continue to be appropriate for the Proposed Action? Yes, an interdisciplinary team developed the proposed action and is aware that it is in conformance with the Fire Plan and LUP.
5. Are the direct and indirect impacts of the Proposed Action unchanged from those identified in the existing NEPA document? Yes. The proposed stabilization actions were identified and analyzed in the existing LUP and specifically provided for in the Fire Plan.
6. Are the cumulative impacts that would result from implementation of the Proposed Action unchanged from those analyzed in the existing NEPA document(s)? Yes, the Fire Plan outlines the proposed action, giving latitude to the interdisciplinary team to develop a detailed plan for emergency stabilization.

7. Is the public involvement and interagency review associated with the existing NEPA document(s) adequate for the Proposed Action? Yes, the LUP and Fire Plan were subject to both.

INTERDISCIPLINARY REVIEW: Identify those team members conducting or participating in the NEPA analysis and preparation of this work sheet (by name and title).

<u>Name</u>	<u>Title</u>	<u>Resource Represented</u>
Mark Wimmer	Rangeland Management Specialist	Soil/Water/Air
Mike Kinser	Rangeland Management Specialist	Riparian/Wetlands
Carla Scheck	Ecologist	Sensitive Plants, Weeds, Vegetation
Cheryl Harrison	Archaeologist	Cultural, Native American Concerns
Karl Mendonca	Supervisory Natural Resource Specialist	Noxious Weeds, Invasive Species
Kay Hopkins	Outdoor Recreation Planner	VRM, ACEC, WSA, Recreation
Tom Fresques	Wildlife Biologist	Migratory Birds, Wildlife

MITIGATION: None.

NAME OF PREPARER: Mark Wimmer

DATE: September 15, 2006

## CONCLUSION

CO-140-2006-150 DNA

Based on the review documented above, I conclude that this proposal conforms to the land use plan and that the NEPA documentation previously prepared fully covers the Proposed Action and constitutes BLM's compliance with the requirements of NEPA.\*

SIGNATURE OF RESPONSIBLE OFFICIAL:

  
for Field Manager

DATE SIGNED:

9/15/2006

\*Note: The signed Conclusion on this worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision.

## Part 1. Fire Summary

### Red Apple Fire

#### EMERGENCY STABILIZATION PLAN

##### Glenwood Springs Field Office Colorado State Office

#### FIRE BACKGROUND INFORMATION

The Red Apple Fire was human caused (pending investigation) Thursday 8/31/06 in Garfield County, Colorado southwest of Rifle, Colorado. The Rifle Fire Department and Central Zone Fire of the Upper Colorado River Fire Management Unit responded to the incident following a smoke report by BLM employees. The fire, pushed by northwest winds burned south and east of private lands and onto BLM lands (see attached map). A local unified fire management group assumed command of fire operations with support from Federal, State, and local fire crews. During the burn period of the afternoon and evening of the 31<sup>st</sup>, the fire grew to 828 acres. The fire largely burned grass, sagebrush, and juniper. The fire intensity was generally moderate with some pockets of high intensity. A combination of air attack (a heavy air tanker, three SEAT planes, a heavy and light helicopter) and ground support stopped the spread of the fire after the initial burn period. The fire was contained on Sunday, 9/3/06 with a total of 828 acres burned, 138 acres of BLM and 689 acres of private.

Fire Name	Red Apple Fire (GFX Assist #21)
Fire Number	C5PH
District/Field Office	Glenwood Springs Field Office
Admin Number	CO-140
State	Colorado
County(s)	Garfield
Ignition Date/Cause	08/31/2006, presumed human caused
Date Contained	09/04/2006
Jurisdiction	<i>Acres</i>
BLM	138.79
<i>State</i>	0
<i>Private</i>	689.83
<i>Other</i>	0
Total Acres	828.62
Estimated Costs, for example Below \$50,000; \$50,000 - \$100,000; or Above \$100,000	Below \$50,000

## **PART 2. – Critical Resource Concerns**

The objectives of emergency stabilization is to “determine the need for and to prescribe and implement emergency treatments to minimize threats to life or property or to stabilize and prevent unacceptable degradation to natural and cultural resources resulting from the effects of a fire.” [620DM3]

The priorities of emergency stabilization are: 1). Human Life and Safety, and 2). Property and unique biological (designated Critical Habitat for Federal and State listed, proposed or candidate threatened and endangered species) and significant heritage sites. [620DM3]

### **Emergency Stabilization Issues**

1. Human Life and Safety: n/a

2. Soil/Water Stabilization:

The fire has exposed the mineral soil surface to increased raindrop impact, and consumed organic matter and biota. The exposed soil is now subject to water and to a lesser extent, wind erosion. Extensive soil loss is possible especially due to the fact that 84% of the BLM soils are classified as having severe erosion potential, with the remainder classified as moderate. Potential soil loss would likely reduce the potential for perennial plant establishment and increase the potential spread of invasive plants.

Reseeding of the burn area with native species would help stabilize the soils throughout the burn area resulting in a decreased potential for run-off. Seeding of the area within the first growing season (fall, 2006) would be critical to meeting management objectives.

3. Habitat for Federal/State Listed, Proposed or Candidate Species: n/a

4. Critical Heritage Resources: A cultural survey of the suppression bulldozer lines was accomplished following initial fire suppression. The survey yielded no findings. The proposed emergency stabilization was reviewed by the Glenwood Springs Archaeologist who determined that no additional cultural survey work was needed.

5. Invasive Plants:

Potential exists for expansion of noxious weeds and other invasive plants into the burned area. Cheatgrass, musk thistle, and plumeless thistle have been documented in the vicinity. Expansion of these weeds into the burned area would alter ecosystem integrity and function, and fire regimes.

There is no habitat for special status plants within or immediately adjacent to the burned area. Therefore, there should be no direct, indirect or cumulative impacts to special status plants.

## Description of Anticipated Types of Treatments

- Aerially seed BLM lands during Fall 2006 (FY 2007). Coordinate with seeding of private land through NRCS.
- Suspend grazing in the northern portion of the Spruce Gulch Common allotment for a minimum of 2 years or until the seeded species have become fully established. Seeded species will be considered established when 50% of the seeded plants are producing seed.
- Monitor the success of rehabilitation efforts for three growing seasons following application. (This would involve establishing 2-3 photo plots and Daubenmire and/or Step-Point Transects within the burn.)
- Monitor for and treat noxious weeds for a minimum of 3 years

Expansion of invasive species into the burned area would alter ecosystem integrity, function and fire regimes. Short and long-term effects are likely to include:

- Reductions in the abundance and diversity of native plant species important for wildlife and livestock utilization.
- Increased abundance of weedy and invasive species.
- Accelerated loss of soil through wind and water erosion.
- Increased fire frequency and intensity.
- Loss of site productivity.

6. Other Issues or Concerns: n/a

## PART 3. - DESCRIPTION OF ANTICIPATED TYPES OF TREATMENTS

**Issues 1-5: Human Life and Safety, Soil/Water Stabilization, Habitat for Federal/State Listed, Proposed or Candidate Species, Heritage Resources Protection and Invasive plants**  
Treatments for these issues are the same and will be discussed together. In general, the burn area will be reseeded in order to stabilize the soil, prevent invasive plants from establishing at the site, and stabilize habitat for big game species. Monitoring of vegetation efforts will be performed throughout a three year window under ES&R guidelines.

### **Treatment/Activity: *Aerial Seeding***

#### **A. Treatment/Activity Description:**

Seeding will be accomplished throughout the burned area through aerial application. Seeding would take place in the late fall in order to allow seed scarification and to take advantage of spring moisture for germination. Planting in the fall window would also allow some seeded species to establish before cheatgrass thus reducing the ability of cheatgrass and other invasive weeds to establish within the burn perimeter.

#### **B. How does the treatment relate to damage or changes caused by the fire?**

The goal of seeding is to re-establish vegetation on the Red Apple Fire area. The plant cover will provide soil stabilization by protecting the soil from rain drop impact and

sheet/rill erosion. Vegetation establishment helps protect soils and reduces impacts of sedimentation thus protecting water quality. Protecting the soils and preventing weed encroachment are important in the overall goal of preserving ecosystem integrity, site production and avoiding a change in fire regime/condition class. A well established vegetative cover of native species would also help protect habitat for big game species and livestock.

### **C. How is the treatment consistent with the Land Use Plan?**

The Glenwood Springs Interagency Fire Management Plan identifies criteria for the establishment of fire management priorities based on landscape-level resource goals and objectives. These goals and objectives include emergency stabilization and rehabilitation treatments. These treatments are also consistent with goals dealing with soils, cultural resources, grazing, endangered species, fire management and habitat management. The Stabilization and Rehabilitation Plan analyzed aerial seeding among other methods. Aerial seeding was determined to be appropriate for the Red Apple Fire for emergency stabilization.

### **D. Monitoring:**

The monitoring plan is explained in detail later in the plan.

#### **1. How will implementation be monitored?**

Implementation monitoring will be achieved through visual inspections by BLM staff to ensure that the entire treatment area has been adequately seeded and that livestock are removed. If necessary, non-compliance will be documented using digital photography.

#### **2. How will effectiveness be monitored?**

The goal of treatment effectiveness monitoring is to evaluate the success of the aerial application through Daubenmire frequency transects and photo points. Monitoring will be conducted the first two years.

### **E. What is the cost of the treatment/activity?**

Various factors such as topography have identified aerial seeding the most effective treatment for the burn area. The projected costs for seeding 138 acres within this project are \$19,444.00. The cost of stabilizing this fire site now would be less than the costs of future actions. Without treatment, the site would be degraded by erosion, loss of productivity, and increase the presence of invasive plants, and costs of rehabilitation or restoration efforts would likely increase as time progresses.

### **F. MONITORING PLAN**

All project monitoring will be completed by BLM personnel. Monitoring results will be analyzed yearly and summarized after two years of data collection. An ID team will analyze the data as part of the summary to determine if stabilization objectives were met. In addition, a year-end monitoring report will be completed each fiscal year for the stabilization project and submitted through state and national ES&R coordinators. It is



understood that these reports will be made available nationally to Bureau and non-Bureau personnel through the ES&R website. At the completion of the project, all monitoring results will be summarized into a *Red Apple Fire Final Monitoring Report* with a section on “what worked/what did not work” and “lessons learned”. This report will be made available through the same channels described above.

**Monitoring methodology is as follows:**

Frequency data will be collected at 2-3 study sites which will be established. Each study site will consist of a photo point study and Daubenmire frequency transect consisting of a 30 meter permanent transect. The photo point study consists of a photo of a square meter plot and an aspect photo.

**Successful treatments are defined by the following objectives:**

Year 1 objectives will not include the seeded shrubs. Shrubs begin to emerge after year two and therefore shrub objectives will not be defined until year three. Grass and forb germination is expected to be high in the first growing season but many of the seedlings will not establish and persist into the second and third growing season. The target threshold objectives are designed around this ecological trend.

Year 1 Objectives

*Vegetation Objective:*

Obtain average frequency of 30 to 40% of seeded grasses and forbs by the end of the first growing season following seeding within all study sites within the Red Apple Fire ES&R treatment area.

Year 2 objectives are combined with overall vegetation treatment monitoring objectives for the Red Apple Fire rehabilitation project:

*Vegetation Objective:*

Obtain average frequency of 50 to 60% of seeded grasses and forbs by the end of the third growing season following seeding within all study sites within the Red Apple Fire ES&R treatment area.

Obtain average frequency of 15-20% of sagebrush plants by the end of the third growing season following seeding within all study sites within the Red Apple Fire ES&R treatment area.

**Management Frequency Objective for Treatment Effectiveness**

Reduce the frequency of perennial and annual weeds over time within the project area.

**Management Frequency Objectives For Treatment Effectiveness**

Obtain relative frequency values for the seeded species of 40% for perennial grasses, 5% for forbs, and 10% for woody species within the burn area by the year 2009.

**Appendix: Maps & Cost Summary**

## EMERGENCY STABILIZATION COST SUMMARY

Action/ Spec. #	Planned Action	Unit	# Units	Unit Cost	FY06	FY07	FY08	FY09	Action/ Spec. # Totals
S1	Planning (plan prep/project management, rangeland monitoring)	Work-months	1.5	\$3,025-\$7,300.00	\$0	\$4,406	\$2,203	\$2,203	\$8,812
S2	Aerial Seeding (Flight Time)	Acres	138	\$11.00	\$0	\$1,518	\$0	\$0	\$1,518
S3	Seed Cost	Acres	138	\$141.00	\$0	\$19,444	\$0	\$0	\$19,444
S4	Weed spraying	Acres	15	\$30.00	\$0	\$450.00	\$450.00	\$450.00	\$1,350.00
	<b>TOTAL COSTS</b>				\$0	\$25,818	\$2,653	\$2,653	\$31,124

## AERIAL SEED

Species	Aerial Seeding [Acres]	Lbs./Acre	Total Lbs.	Cost / Lb.	Total Cost	PLS Seeds/sq.ft./lb/ac.	PLS Seeds/sq.ft.
4 wing	138	1.00	138	\$21.00	\$2,898		1.10
Shadscale	138	1.00	138	\$20.00	\$2,760		1.50
Wyoming Sage	138	0.10	14	\$60.00	\$828		2.80
Sandberg's bluegrass	138	0.65	90	\$4.00	\$359		13.80
Western wheatgrass	138	5.00	690	\$7.70	\$5,313		13.50
Bluebunch wheatgrass	138	4.00	552	\$4.45	\$2,456		13.30
Indian ricegrass	138	2.50	345	\$14.00	\$4,830		13.50
<b>Totals</b>	138	14.25	1,967		\$19,444		59.50

## SEED MIX

Species of Seed	Variety	Rate (PLS lbs./acre)	PLS Seeds/sq. ft.
<b>4-wing saltbush</b>	<b>North of 37° latitude</b>	<b>1.0</b>	<b>1.1</b>
<b>Shadscale</b>		<b>1.0</b>	<b>1.5</b>
<b>Wyoming Sage</b>		<b>0.25</b>	<b>2.8</b>
<b>Sandberg bluegrass</b>		<b>0.65</b>	<b>13.8</b>
<b>Western wheatgrass</b>	<b>Arriba</b>	<b>5.0</b>	<b>13.5</b>
<b>Bluebunch wheatgrass</b>	<b>P-7 or Secar</b>	<b>4.0</b>	<b>13.3</b>
<b>Indian ricegrass</b>	<b>Paloma</b>	<b>2.5</b>	<b>13.5</b>
<b>Total</b>		<b>26.4</b>	<b>75.9</b>

EMERGENCY STABILIZATION TEAM MEMBERS (Glenwood Springs Field Office)

<u>Name</u>	<u>Title</u>	<u>Resource Represented</u>
Mark Wimmer	Rangeland Management Specialist	Soil/Water/Air
Mike Kinser	Rangeland Management Specialist	Riparian/Wetlands
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Tom Fresques	Wildlife Biologist	Migratory Birds, Wildlife